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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
NELSON, MICHAEL B	
ART UNIT	**PAPER NUMBER**
1794	

NOTIFICATION DATE	DELIVERY MODE
02/03/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/564,501	GIRON ET AL.	
	Examiner	Art Unit	
	MICHAEL B. NELSON	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 January 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18,21 and 22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18,21 and 22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/05/09 has been entered. Claims 1-18, 21 and 22 are currently under examination on the merits.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-18, 21 and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 recites the terms "protective" and “carrier" in reference to the first and second rigid substrates, yet these terms are not adequately disclosed in the original specification. “Protective” appears in the original specification only to describe the protective polymer interlayer (Page 1) or in reference to a protective additional third glass substrate (Page 5). "Carrier" appears only on page 14 in reference to electrical carriers. These terms are never

used in the specification to describe the two rigid substrates and are therefore considered new matter. These terms are further discussed in the Response to Arguments section.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-11, 15-18, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giron et al. (WO/2002/006889), see English language equivalent Giron et al. (U.S. 2004/0053125) in view of Barth et al. (U.S. 6,294,233).

Regarding claim 1, Giron et al. discloses a glazing assembly, which reads on the limitations of instant claim 1.

(See [0020]-[0024], the active layers (i.e. electrochromic system layers) and the protective polymer layer lie in between the two rigid substrates. The order of the layers is disclosed at [0080]: rigid glass substrate (1), active stack (2) (3) and (4), EVA film (not shown in Figs.) and second rigid glass substrate (5). The presence of the EVA film between the active component of the glazing and the second glass layer is further disclosed at [0024] and [0025]. The first rigid glass substrate is a "protective" substrate in that it provides a degree of protection to the internally laminated active stack. The second rigid substrate is a "carrier" substrate in that it is bonded to and carries the active stack and the EVA film.)

While Giron et al. does not explicitly disclose that the polymer layer functions to retain fragments of the glazing assembly should the assembly break, in light of the substantially identical polymer layer thickness and composition (i.e. polyurethane ([0024]) 0.8 mm thick ([0091])) with the instant disclosed polymer layer, (See instant specification, page 9, lines 1-5), it will, intrinsically, possess the claimed properties, absent any objective evidence to the contrary. See MPEP 2112 (In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980).

Giron et al. does not explicitly disclose an additional solar protective layer being positioned on the outer face of the first substrate, however, Barth et al., which is also directed

towards optically functional glass based panels, discloses that solar protective films, which could be affixed to the outer surface of glass panels, were known to those having ordinary skill at the time of the invention (C1, L25-50). One having ordinary skill in the art would have found it obvious to have provided one of solar protective films of Barth et al. to the outer surface of the substrates of the panel of Giron et al. in order to improve the protection from solar radiation (C1, L15-25).

Regarding claims 2, 3, 9 and 10, modified Giron et al. discloses all of the claimed limitations as set forth above. Additionally, the reference discloses a glazing assembly which reads on claims 2, 3, 9 and 10.

(See Abstract, the active system in the assembly is electochromic, which provides and optical function. See [0124], the screen-printing of conductive strips in place of the wires which lie along the periphery of the substrates (Fig. 7, 14a-c, 15a-c) is disclosed. These conductive strips would alter the opacity of the substrate to some degree and therefore would constitute an opacifying coating. See [0040]-[0046], the deactivated lower electroconductive layer along the periphery of the substrate, (deactivated via localized ablation, [0046]), constitutes a margining line.)

Regarding claims 4-8, 21 and 22, modified Giron et al. discloses all of the claimed limitations as set forth above. Additionally, the reference discloses a glazing assembly which reads on claims 4-8, 21 and 22.

(See [0091]-[0092], the two substrates are of glass about 2mm thick each, and the plastic layer is 0.8mm thick, which makes a total thickness of 2.8mm thick. The other layers deposited in the assembly have a maximum disclosed total thickness of 1340 nm or

0.00134mm (i.e. 20+350+100+100+100+370+300 nm), making the total assembly thickness 2.80134mm, which lies within the ranges of instant claims 5 and 6. The two glass substrates are about 2mm thick each, which makes them substantially the same dimension and they have identical rectangular shapes, while in Fig. 4 ([0107]), one glass pane is smaller than the other, giving it the same shape with different dimensions. See [0070], the glass substrates are disclosed as being bulk tinted, which gives them a degree of opacity and therefore makes them opacified substrates.)

Regarding claims 11, 15 and 16, modified Giron et al. discloses all of the claimed limitations as set forth above. Additionally, the reference discloses a glazing assembly which reads on claims 11, 15 and 16.

(See [0069]-[0070], an insulating polymer film frame is disclosed to lie around the periphery of the substrates as a seal, with two of its sides having flexible conductive current leads or conductive coatings which serve as connection elements for the active system within the frame and also provide a degree of mechanical reinforcement for the polymer seal. Also, the polymer film frame is positioned on, and at least partially fills, the marginal deactivated areas, which, being deactivate via ablation, constitute open groove spaces between the two substrates.)

Regarding claim 17, modified Giron et al. discloses all of the claimed limitations as set forth above. Additionally, the reference discloses a method of forming an article comprising, forming an article with a glazing assembly; wherein the article is selected from the group

consisting of a window, a sunroof, a skylight, a display panel, a display case, and a piece of furniture.

(See [0080]-[0092], the method for making assembly is disclosed. See [0074], an embodiment of the assembly in an automobile roof (i.e. sunroof) is disclosed.)

Regarding claim 18, Giron et al. discloses all of the claimed limitations as set forth above.

Giron et al. does not explicitly disclose the specific passing of the safety tests of the ECE R43 and ANSI Z26.1 standards for the glazing assembly. However, in light of the substantially identical glass substrate thickness, polymer layer composition and thickness and the substantially identical sealants in the glazing assembly of Giron et al. with the instant glazing assembly, it will, inherently, possess the claimed properties, absent any objective evidence to the contrary. See MPEP 2112 (In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980).

8. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giron et al. (WO/2002/006889) in view of Barth et al. (U.S. 6,294,233) as applied to claims 1 and 11 above, and further in view of Johnson et al. (U.S. 6,284,360).

Regarding claims 12-14, modified Giron et al. discloses all of the claimed limitations as set forth above. Additionally Giron et al. discloses a glazing assembly used in an embodiment for a vehicle sun roof, ([0074]), which would require a secondary frame seal to mount the assembly into the vehicle.

Giron et al. does not disclose a glazing assembly which explicitly meets the limitations of claims 12-14.

Johnson et al. discloses a sealant composition for use with motor vehicle windshields (See Abstract) which meets the limitations of claims 12-14.

(See Fig. 8, the seal encapsulates and is in contact with the edges of the windshield. Also see Fig. 7, the seal is flush with both outer faces of the windshield.)

The use of produce-by-process limitations has been noted in Claim 13, such as, for example, "seals are formed by extrusion or obtained by encapsulation." While Johnson et al. **does** in fact teach these processes to produce seals, the examiner notes that even though a product-by-process is defined by the process steps by which the product is made, determination of patentability is based on the product itself. In re Thorpe, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). As the court stated in Thorpe, 777 F.2d at 697, 227 USPQ at 966 (The patentability of a product does not depend on its method of production. In re Pilkington, 411 F.2d 1345, 1348, 162 USPQ 145, 147 (CCPA 1969). If the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.).

Giron et al. discloses a glazing assembly for use in a vehicle sun roof without any specific mention of the means for mounting the glazing assembly and therefore it would have been obvious to look to other references for an appropriate vehicle mounting system (as in Johnson et al.). The inventions of both Giron et al. and Johnson et al. are drawn to the field of windshields and therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have included the sealant of Johnson et al. with the assembly of Giron et al. for the purposes of installing the windshield in the vehicle for which it is intended to reside.

Response to Arguments

9. Applicant's arguments filed on 01/05/09 have been considered but are not persuasive.

Regarding applicant's arguments directed towards the order of the layers of Giron et al., as was stated in the previous response to arguments, the disclosure of Giron et al. reads on the instantly claimed order of layers:

> "Applicant's citations seem to confirm the examiner's citation at paragraph 80 in that they show that the stack of Giron et al. comprises in order: glass substrate : active stack : EVA layer : glass substrate."

Applicant has added the limitations "carrier" and "protective" to claim 1 and although these additions constitute new matter, even if these were adequately disclosed in the original specification, they would not render the claims patentable over the prior art. The examiner first wishes to point out that the added limitations provide a difference between the two rigid substrates in name alone. Either substrate of Giron et al. would be considered protective, or at the same time, a carrier to one having ordinary skill in the art and therefore the added limitations do little to limit the scope of the claim. The fact that Giron et al. describes the orientation of the active stack in terms of which electrodes are directly contacting a rigid substrate (i.e. carrier substrate, [0021]) does not definitively brand that substrate a "carrier" nor is that substrate prevented from being considered "protective."

The fundamental issues seems to be applicant's attempt to distinguish to which side of the glazing assembly the active stack is adhered to (i.e. the inner face of the substrate which is facing the interior or user or the inner face of the substrate which is facing the exterior or away from the user). This relationship is not made clear in the instant claims nor can the examiner find clear

reference in the specification as originally filled which specifies which side of the glazing would be adhered to the active stack (in relation to the exterior/interior of the structure into which the glazing is to be installed).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL B. NELSON whose telephone number is (571) 270-3877. The examiner can normally be reached on Monday through Thursday 6AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MN/
01/08/09

/Callie E. Shosho/
Supervisory Patent Examiner, Art Unit 1794